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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,895	07/10/2003	Robert P. Meagley	ITL.0907US (P15299)	1697
21906	7590	06/14/2006	EXAMINER	
TROP PRUNER & HU, PC			SCHILLING, RICHARD L	
1616 S. VOSS ROAD, SUITE 750			ART UNIT	
HOUSTON, TX 77057-2631			PAPER NUMBER	

1752

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/616,895  
Filing Date: July 10, 2003  
Appellant(s): MEAGLEY ET AL.

**MAILED**  
JUN 14 2006  
**GROUP 1700**

Trop, Pruner & Hu, PC  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed May 09, 2006 appealing from the office action mailed 12-03-05.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

**WITHDRAWN REJECTIONS**

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner. The obviousness-type double patenting rejection over application No.10/337,575 is withdrawn due to the abandonment of application No. 10/337,575 with no record of the filing of a continuation application.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,116,885	Hattori et al.	5-1992
2002/0132061	Sezi	9-2002

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 4-15, 18, 19, 22-25 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sezi in view of Hattori et al. Sezi ( see particularly paragraphs 17, 25, 27, 32-35, 37; example 5 ) discloses compositions comprising polymers, preferably including polybenzoxazoles and their polyhydroxyamide precursors, and fillers having particle sizes less than 1000nm, preferably less than 100nm and more preferably 0.5-20nm. Examples of disclosed fillers include silica, titanium, aluminium and oxides of various metals but zirconia ( zirconium oxide ) is not disclosed. Example 5 coats polyhydroxyamide and 3g of fine silica onto a silicon disk and applies heat to convert the polyhydroxyamide into polybenzoxazole. While Sezi does not disclose zirconia filler, zirconia is a known filler that may be used instead of silica and various other metal fillers and their oxides disclosed in Sezi as shown by Hattori et al. ( see particularly col. 2, line 63- col. 3, line 3 ). Hattori et al. discloses that inorganic fillers for polymer compositions may include silica, zirconia, titania, alumina, etc. It would be obvious to one skilled to substitute the known inorganic filler zirconia shown to useful in Hattori as a filler along with fillers as disclosed Sezi as the filler, particularly metal oxide filler, called for in Sezi with a reasonable expectation of similar results.

#### **(10) Response to Argument**

Appellants rely on the declaration submitted November 7, 2005 to rebut the assertion of obviousness. The declaration states that zirconia and silica were used with photodefinable polymers and that zirconia had greatly reduced thixotropy as compared to silica. No other details are given in the declaration. The polymer is not identified. The

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concentrations, sizes and shapes of the fillers are not given. The specific zirconia polymer compositions disclosed in the specification use 13nm zirconia at 9-20% by wt. Therefor, the declaration is not commensurate in scope with the claimed subject matter. Also, the declaration fails to show that the difference in thixotropy is critical to the invention. Appellants' specification discloses silica and zirconia as equivalent fillers and is silent as to thixotropy or viscosity or any different coating properties. The above applied prior art coats silica in polymer compositions without any disclosed problems of viscosity changing with shear or mixing, Also, the declaration does not define "greatly" reduced. One skilled in art would expect somewhat different properties for different filler compounds and still use the different fillers unless the different properties had a significant effect on the use of the fillers. Appellants' specification, Sezi and Hattori et al. all use silica in polymer compositions and are silent as to thixotropy effecting coating or other properties. It also cannot be determined from the declaration that the zirconia and silica fillers where used at equivalent concentrations, sizes and shapes ( e.g. tabular, spherical ) to show that the said difference in thixotropy is due to compositions of the fillers instead of the sizes, shapes or concentrations of the fillers. Also, the declaration does not show that the differences in thixotropy between zirconia and silica depend on their use with the polymers of the claims on appeal and are not inherent properties of the known fillers in any polymer compositions. The polymer used in the declaration is not specially set forth; and comparisons with other polymers ( assuming that the polymer used in the declaration is that of the claims on appeal ) are not made.

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Appellants argue that thixotropy is due to zirconia not particle size and that the declaration shows that zirconia is more effective than silica over the entire range of the claims. For the reasons given above, it is believed that the declaration fails to make such showings.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Richard I. Schilling



RICHARD L. SCHILLING  
PRIMARY EXAMINER  
GROUP 1400/1752

Conferees:

Patrick Ryan



Cynthia Kelly

